

## **Optical contrast of a photonic crystal and the self energy shift of the energy levels of atoms**

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### **Abstract**

The influence of a photonic crystal medium on the character of the interaction of electrons with their own radiation field is studied. As was recently shown, this influence changes the electromagnetic mass of the electrons in photonic crystals. This alters atomic energy levels. The dependence of this effect on the optical contrast of photonic crystals is studied. © Ilerton Press, Inc., 2012.

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